

***REMARKS***

Applicants respectfully request the Examiner to reconsider the present application in view of the foregoing amendments to the claims.

***Status of the Claims***

In the present Reply, claims 1, 3, 6-8, 11, 12 and 14 have been amended. Also, claims 2, 13, 16, 19, 22 and 25 are canceled without prejudice or disclaimer of the subject matter contained therein. Thus, claims 1, 3-12, 14, 15, 17, 18, 20, 21, 23 and 24 are pending in the present application.

No new matter has been added with these amendments. For instance, the amendment to claim 1 is supported in the present specification at least at page 5, lines 6-17 and page 11, lines 21-23 and by original claim 2. With the amendment to claim 1, the dependencies of claims 3, 6-8, 11, 12 and 14 were appropriately changed. Thus, no new matter has been added.

Based upon the above considerations, entry of the present amendment is respectfully requested.

In view of the following remarks, Applicants respectfully request that the Examiner withdraw all rejections and allow the currently pending claims.

***Issues Under 35 U.S.C. § 102(b)***

Claims 1, 3-9 and 13-16 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Forreiter et al. (*The Plant Cell*, Vol. 9, pp. 2171-2181 (1997)) (see paragraph 4 of the Office Action).

Also, claims 1-7, 12, 14, 15, 17, 18, 20, 21, 23 and 24 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Hansen '961 (WO 98/54961) (see paragraph 5 of the Office Action).

Further, claims 16, 19, 22 and 25 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Hiei et al. '616 (U.S. Patent No. 5,591,616) (see paragraph 6 of the Office Action).

Applicants respectfully all rejections, and reconsideration and withdrawal thereof are respectfully requested.

#### Distinctions over Forreiter

Forreiter appears to disclose the stable transformation of an Arabidopsis cell suspension culture with firefly luciferase, which provides a cell system for analysis of chaperone activity *in vivo* (see Abstract). Also, the Examiner refers Applicants to parts of pages 2178 and 2179 of the cited Forreiter reference for asserted disclosure of the present invention. However, Applicants respectfully submit that Forreiter fails to disclose all instantly claimed features. In particular, the cited Forreiter reference fails to disclose a method wherein the Arabidopsis cells are centrifuged while or prior to transformation as instantly claimed. Instead, Forreiter et al. discloses centrifugation is carried out after the gene introduction (see page 2178, 6<sup>th</sup> paragraph). Therefore, the present invention is not anticipated.

With regard to page 2179, 3<sup>rd</sup> paragraph of Forreiter, this description is not directed to a gene introduction by *Agrobacterium*. Thus, even in this regard, Forreiter fails to disclose all instantly claimed features.

With regard to the comments in the Office Action at page 3, lines 8-11, Applicants respectfully refer the Examiner to the scope of claim 1 as presented herein.

Overall, because “a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference,” the cited Forreiter reference cannot be a basis for a rejection under § 102(b). *See Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Thus, because of the lack of disclosure of all features as instantly claimed, the rejection in view of Forreiter is overcome. Reconsideration and withdrawal of this rejection are respectfully requested.

#### Distinctions over Hansen ‘961

The cited Hansen ‘961 reference appears to disclose an improved method of *Agrobacterium* transformation of plants by utilizing conditions capable of inhibiting *Agrobacterium*-induced necrosis (see Abstract). The Examiner further refers Applicants to parts of pages 18 and 19 of Hansen ‘961 and to parts of Cooper (*The Tools of Biochemistry*) to form the instant rejection. However, similar to the disclosure in Forreiter, the cited Hansen ‘961 reference fails to disclose a method wherein the *Arabidopsis* cells are centrifuged while or prior to transformation as instantly claimed. Besides *Verdegaal Bros.*, Applicants note that: “The single reference must describe and enable the claimed invention, including all claim limitations,

with sufficient clarity and detail to establish that the subject matter already existed in the prior art and that its existence was recognized by persons of ordinary skill in the field of the invention.” See *Elan Pharmaceuticals Inc. v. Mayo Foundation for Medical Education and Research*, 64 USPQ2d 1292, 1296 (Fed. Cir. 2002) (citing *Crown Operations International, Ltd. v. Solutia Inc.*, 289 F.3d 1367, 1375, 62 USPQ2d 1917, 1921 (Fed. Cir. 2002); *In re Spada*, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990) (“the reference must describe the applicant’s claimed invention sufficiently to have placed a person of ordinary skill in the field of the invention in possession of it”).

As for the bottom of page 18 and lines 1-2 of page 19 as cited in the Office Action, centrifugation treatment is not even described. Thus, Applicants respectfully maintain that Hansen ‘961 fails to disclose all features as instantly recited.

Accordingly, under *Verdegaal Bros.* and *Elan Pharmaceuticals*, this rejection has been overcome since Hansen ‘961 fails to disclose all instantly claimed features. Reconsideration and withdrawal of this rejection are respectfully requested.

#### Distinctions over Hiei ‘616

Hiei ‘616 appears to disclose a method for transforming monocotyledons (see Abstract). The Examiner refers Applicants to Table 8 of Hiei ‘616 and to the *In re Thorpe* reference. However, Hiei ‘616 fails to disclose a method wherein the *Arabidopsis* cells are centrifuged while or prior to transformation as instantly claimed. Thus, Applicants respectfully submit that

this rejection has been overcome as well. *Verdegaal Bros.* Reconsideration and withdrawal of this rejection are respectfully requested.

***Issues Under 35 U.S.C. § 103(a)***

Claims 1, 3-10 and 13-16 stand rejected under 35 U.S.C. § 103(a) as being anticipated by Forreiter et al., as discussed above for claims 1, 3-9 and 13-16 (see paragraphs 7-8 of the Office Action). Applicants respectfully traverse.

As mentioned, Forreiter fails to disclose all instantly claimed features, including a method wherein the *Arabidopsis* cells are centrifuged while or prior to transformation as instantly claimed. Also, Forreiter is not directed to gene introduction by *Agrobacterium*. Thus, Forreiter fails to disclose all instantly claimed features, and a *prima facie* case of obviousness has not been established. This is because U.S. case law squarely holds that a proper obviousness inquiry requires consideration of three factors: (1) the prior art reference (or references when combined) must teach or suggest all the claim limitations; (2) whether or not the prior art would have taught, motivated, or suggested to those of ordinary skill in the art that they should make the claimed invention (or practice the invention in case of a claimed method or process); and (3) whether the prior art establishes that in making the claimed invention (or practicing the invention in case of a claimed method or process), there would have been a reasonable expectation of success. See *In re Vaeck*, 947 F.2d 488, 493, 20 USPQ2d 1438, 1442 (Fed. Cir. 1991); see also *In re Kotzab*, 55 USPQ2d 1313, 1316-17 (Fed. Cir. 2000); *In re Fine*, 5 USPQ2d 1596 (Fed. Cir. 1988). In this regard, not even the initial requirement of disclosure of all claimed features has

been satisfied (as also applied to the rejection under § 102(b)). Thus, a *prima facie* case of obviousness has not been established and Applicants respectfully request withdrawal of this rejection.

Applicants also submit that the other requirements for a *prima facie* case of obviousness have not been satisfied (e.g., motivation; reasonable expectation of success). Applicants note that the centrifugation in Forreiter is for a different purpose. One of skill in the art would not be motivated in using the disclosure in Forreiter to achieve the present invention since the centrifugation in Forreiter is for collecting infected cells, which is a different purpose from the present invention.

Applicants further submit that unexpected results exist for the present invention, whereby these unexpected results rebut any asserted *prima facie* case of obviousness based on the cited combinations of references. With the present invention, the efficiency of transformation of plants is largely increased, which is a prominent effect that is totally unexpected from the art or any disclosure in Forreiter. Thus, Applicants respectfully request such unexpected results as rebutting the instantly formed rejection under § 103(a).

Thus, based on the above, Applicants respectfully request reconsideration and withdrawal of this rejection.

### **Conclusion**

A full and complete response has been made to all issues as cited in the Office Action. Applicants have taken substantial steps in efforts to advance prosecution of the present

**Application No.: 10/089,695**

**Docket No.: 0760-0305P**

**Art Unit 1638**

**Reply to Office Action of January 31, 2005**


application. Thus, Applicants respectfully request that a timely Notice of Allowance issue for the present case.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Eugene T. Perez (Reg. No. 48,501) at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Dated: June 30, 2005

Respectfully submitted,

By   
Gerald M. Murphy, Jr. #21, 0666

Registration No.: 28,977

BIRCH, STEWART, KOLASCH & BIRCH, LLP

8110 Gatehouse Rd

Suite 100 East

P.O. Box 747

Falls Church, Virginia 22040-0747

(703) 205-8000

Attorney for Applicant